

Claims

1. A strip having a plurality of lamellae which are interconnected via a first connecting element, each lamella comprising two opposing lamella legs and having at least two recesses extending transversely to the longitudinal axis of the strip, at least one second connecting element being formed between the recesses.
2. The strip according to claim 1, wherein the second connecting element allows the strip to be compressed and/or extended towards the longitudinal axis of the strip.
3. The strip according to claim 1 or 2, wherein the second connecting element is a connecting web that is inclined by an angle $W1$ with respect to the longitudinal axis of the strip, the angle $W0$ being preferably in a range of 10° to 80° , more preferably in a range of 30° to 70° , even more preferably in a range of 50° to 65° and most preferably 60° .
4. The strip according to any of claims 1 to 3, wherein the second connecting element is in the area of the longitudinal axis of the strip and has preferably the same shape in each lamella, and wherein it is particularly preferred that the second connecting elements of all lamellae have the same orientation.
5. The strip according to any of claims 1 to 4, wherein at least one cut-out extending from the edge of the strip to the first connecting element is arranged between two lamellae adjacent in the longitudinal axis of the strip.
6. The strip according to any of claims 1 to 5, wherein the first connecting element is in the area of the longitudinal axis of the strip and one cut-out is arranged preferably symmetrically to and on both sides of the longitudinal axis in the transverse direction, which cut-out preferably forms a gap with parallel walls, the width of the gap being preferably $1/10$ to $1/20$ of the length of the gap.

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7. The strip according to claim 5 or 6, wherein each cut-out is V-shaped and widens from the first connecting element towards the edge.
8. The strip according to claim 7, wherein each cut-out is symmetrical with respect to the perpendicular to the longitudinal axis and has an aperture angle $W1$ that is preferably within the range of 2° to 30° , more preferably within the range of 3° to 15° , even more preferably within the range of 4° to 10° and most preferably 6° .
9. The strip according to any of claims 5 to 8, wherein each cut-out is rounded in the area of the first connecting element and preferably forms an arc of a circle having a radius $R1$, the radius $R1$ being preferably in the range of 0.2 to 1.5 mm, more preferably in the range of 0.4 to 1 mm and most preferably 0,5 mm.
10. The strip according to any of claims 1 to 9, wherein the respective recesses in the opposing lamella legs are mirror-inverted with respect to the perpendicular to the longitudinal axis of the strip.
11. The strip according to claims 1 to 10, wherein each recess is provided with at least one first section and one adjoining second section, the first section preferably expanding from the longitudinal axis of the strip towards the second section.
12. The strip according to claim 11, wherein the first section of the recess is triangular and has a first side essentially extending towards the perpendicular to the longitudinal axis and a second side extending at an angle $W0$ with respect to the perpendicular, said angle being preferably in the range of 10° to 80° , more preferably in the range of 30° to 70° , even more preferably in the range of 50° to 65° and most preferably 60° .

13. The strip according to claim 12, wherein the second section is strip-like with sides that are parallel to the perpendicular to the longitudinal axis and preferably a third section that widens towards the edge of the strip adjoins the second strip.
14. The strip according to claim 13, wherein the third section is V-shaped and is preferably symmetrical with the perpendicular to the longitudinal axis and encloses an angle W_2 which is preferably in the range of 2° to 30° , more preferably in the range of 3° to 15° , even more preferably in the range of 4° to 10° and most preferably 6° .
15. The strip according to any of claims 11 to 14, wherein the recess is provided with a fourth section and said section is spaced apart from the edge of the strip and rounded, and preferably semicircular with a radius R_2 that is preferably in the range of 0.5 to 5 mm, more preferably in the range of 1 to 3 mm and most preferably 2 mm.
16. The strip according to any of claims 1 to 15, wherein each lamella is provided with a straight edge and the corners are preferably rounded in the area of the transitions into the cut-out.
17. The strip according to any of claims 1 to 16, wherein each lamella has a width of 8 mm in the area of the edge and/or each cut-out has a width of 5,4 mm in the area of the edge and/or the strip has a width of 39 mm and/or the width of the first connecting element perpendicular to the longitudinal axis is 5 mm and/or the width of the recess is at least 2 mm and/or the width of the second connecting element in the direction of its extension is 1.2 mm, each of the aforementioned values being variable by $\pm 50\%$ and the aforementioned values being proportionally increasable and decreasable.
18. The strip according to any of claims 1 to 17, wherein the strip has a thickness d that is preferably in the range of 0.1 to 2 mm, more preferably 0.2 to 1 mm and most preferably 0.5 to 0.6 mm.

19. The strip according to any of claims 1 to 18, consisting of metal, preferably steel and more preferably of aluminium.
20. A skeleton strip having a U-shaped or V-shaped cross-section consisting of a strip according to any of claims 1 to 19, wherein said strip is respectively bent with respect to the longitudinal axis.
21. A profile comprising a skeleton strip according to claim 20 that is extrusion-coated with plastics or rubber.
22. A device for producing a strip according to any of claims 1 to 19, characterized by a respective punching die.
23. A method for producing a strip according to claims 1 to 19 comprising the steps of providing a strip which is preferably made of metal and punching of the described recesses.